

P. Woodruff

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WASHINGTON, D. C.,

August 25, 1875.

The following List of Questions relating to the sanitary condition of a city or town, prepared by a Committee of the American Public Health Association, have been printed for the convenience of the Committee, in order to obtain additions, alterations and suggestions before preparing their final report.

These questions are intended to obtain, as far as possible, the information which would be desired in estimating the healthfulness of a given place, and to ascertain the local and especially the preventable causes of disease at that point.

Facts and not opinions are desired, and the questions are drawn up in that point of view.

A copy of this list of questions is forwarded to each member of the Committee with the request that it be returned to the undersigned on or before October 1, 1875, with such remarks, alterations and additions as may seem desirable.

JOHN S. BILLINGS,
Assistant Surgeon, U. S. A.,
Chairman of Committee.

SCHEDULE A.

Location, Population and Climate.

1. Name of City, County, and State
2. What is its latitude?
3. What is its longitude?
4. What is its altitude above sea level?
5. When was the city founded?.....
6. When was it incorporated?.....
7. What was its population in 1860?.....
8. What was its population in 1870?.....
9. What is its present population?
10. Have meteorological observations been regularly recorded
Relative proportion of native and foreign - European African
in the city?.....
11. If so, by whom, and for how long?
12. Have they been published, if so where?.....
13. The following information is desired in the form of tables to include a period of twenty years if possible. Mean, maximum and minimum temperature of each month; direction and velocity of the prevailing winds in each month; amount of rainfall; mean, maximum, and minimum height of barometer for each month; records of moisture, electricity, ozone, number of clear and cloudy days.*

SCHEDULE B.

Topography and Geology.

1. Is the country surrounding your city level, undulating,
hilly, mountainous, or low and marshy?.....

* NOTE.—The greater part of the information that is attainable under this heading is probably already in the possession of the Signal Bureau.

2. If hilly or mountainous, in what direction, and at what distance, from your city are the nearest hills or mountains?.....
3. How much higher than the general level of your city are the mountains or hills near by?
4. How many feet lower than the general level of your city are the lowest valleys or ravines near by?
5. What modifications of meteorological conditions, and what other influences upon health in your city, are apparently due to topographical features of its immediate vicinity?
6. Is your city surrounded by prairie, forest, market-gardens, villages, or ordinary cultivated farms?.....
7. Was the site of your city originally level, undulating, or very hilly?
8. To what extent was it traversed by ravines?
9. How has the surface been materially changed, by grading, etc., from its original outline?.....
10. What water-courses have been filled up, formed, changed, or modified?
11. How many feet above the present ordinary level of your city is the point of greatest elevation?.....
12. How many feet below the present ordinary level of your city is the lowest place in it?
13. Towards what point, or points, of the compass is the general slope of the surface in your city?.....
14. How many feet rise or fall, per mile, in each direction from the centre, or from any given point which you can conveniently name?.....

15. In what part of your city, and how many acres of the inhabited portion, is what is known as "made land?".....
16. What streams of water pass through or by your city?.....
17. What is the average width of each?.....
18. What is the average depth of each?.....
19. As regards each stream, is the current rapid, moderate, slow, or sluggish?.....
20. To what extent are there natural or artificial falls of water, as over dams, within or near your city?.....
21. What canal or race passes through or near an inhabited part of your city?.....
22. Is the water in such canal usually clear, turbid, or muddy?.....
23. What bodies of water, and what their locality and extent, within or near an inhabited portion of your city?.....
24. For what period of time, and at what seasons of the year, is there stagnant water in any canal, stream, pond, or other body of water within or near an inhabited part of your city?.....
25. To what geological period or formation does the site and vicinity belong?.....
26. What are the surface rocks?.....
27. What are the underlying strata in order of succession from above downwards?.....
28. What is their relative permeability by water?.....
29. In what direction do they dip or slope, and at what angle?.....
30. What is the character of the surface soil?.....

31. When it is disturbed have malarious effects been observed?.....
32. Are any diseases considered to be due to the soil or geological formation?.....

SCHEDULE C.

Water Supply.

1. From what source is the chief water supply?.....
2. From what distance is the water brought?.....
3. In what form of conduit?.....
There is any special system, e.g. Holly, specify
4. To what extent is it accumulated in settling, or other, reservoirs?.....
5. Is any process for filtering, or purifying, used beyond reservoir settling?.....
6. What is the average amount of water, per diem, flowing into receiving reservoirs?
7. What is the average amount of water consumed per diem?.....
8. How many gallons to each inhabitant?.....
9. *Describe accurately the quality of water; as to,
 - a. Ordinary appearance, taste, smell, etc.....
 - b. Degrees of "hardness,"—by Clark's method, as modified by Wanklyn & Chapman.....
 - c. Amount of *solid residue* per gallon;—in grains
 - d. Amount of *chlorine* per gallon;—in grains
 - e. Amount of *organic matter*,—by the "Ammonia process,"—parts per million, both of "Free Ammonia," and "Albuminoid Ammonia."
 - f. Amount of "poisonous metals," if any

* In these determinations the forms and methods described in the Water Analysis of Wanklyn & Chapman are to be preferred.

10. Has the water supplied been offensive in taste or odor at any time? If so, at what time, and to what was the change due? *and if it has been remedied, how?*
11. To what extent is cistern, spring or well-water used?.....
12. Are the cisterns, springs or wells so located and constructed as to be free of danger from sewage and cess-pool contamination?.....
13. Character and quality of "cistern" and "pump" water, specially as to presence of organic matter
Public baths - how arranged and by whom used

SCHEDULE D.

Drainage and Sewerage.

1. What is the area included within the city limits?.....
2. What is the character and sufficiency of the surface drainage?.....
3. Have any drains been constructed to act exclusively as such? If so, for what area?.....
4. At what depth are they placed at the highest point?.....
5. Are there swamps, areas of made land, or places saturated with water near or in the town which are undrained?.....
6. Are the cellars in any part of the town liable to an overflow of water in heavy rains?.....
7. Is there any system of sewerage in the town? If so, is it part of a regular plan?.....
8. How many main sewers are there?.....
9. Where do they discharge?.....

10. How are they constructed, and what is their size at mouth?.....
11. What proportion of the area of the city is not sewered?.....
12. Does the surface drainage pass into the sewers?.....
13. If so, is their capacity sufficient in heavy storms?.....
14. Is any attempt made to utilize the sewage?.....
15. Are the sewers ventilated in any way? If so, how?.....

SCHEDULE E.

Streets and Public Grounds.

1. What is the usual width of the streets?.....

Describe the plan of the streets

2. What is the total length of streets paved?.....

3. What is the total length of streets unpaved?.....

4. How are the roadways constructed?.....

5. How much wooden pavement exists?.....

6. How much asphalt or concrete pavement?.....

7. What are the arrangements and regulations for cleaning

and watering the streets?.....

8. Are they kept in good condition of cleanliness?.....

9. Are shade trees planted along the streets?.....

10. If so, what kind?.....

11. Are they cared for by the corporation or by individual

property owners?.....

12. Are there any public parks belonging to the city?.....

13. If so, state number and dimensions of each?.....

14. Are they within the city limits?.....

15. Are there open squares within the city limits?.....

16. If so, how many, and what is the area of each?.....

There shd. be some questions as to intra-urban transit - such as street cars - and its direct effect by overcrowding or otherwise - and indirectly opening up suburbs

Trees - do they have any direct effect upon health - as sanitation - especially this

17. Are the public parks and squares kept in good condition?.....
18. Are public fountains placed in the parks?.....
19. Are any areas and sources of amusement provided for in
the parks?
20. Furnish copies of any regulations or ordinances relating
to conduct of the parks?.....

SCHEDULE F.

Habitations.

1. How many dwelling houses are there within the city limits?.....
What is the average occupancy of each dwelling - specify where practicable different parts of cities
2. How many of these are tenement houses?.....
an occupancy of each?
3. Is there any regulation as to the material of, and manner
in which houses shall be constructed within the city lim-
its? If so, what is it?.....
4. Is it practically enforced?.....
5. Have any houses been condemned as unsafe within the last
year? If so, how many?.....
6. What proportion of the dwelling houses have proper con-
nection with the sewers?.....
7. Have any houses springs, cisterns, or wells in the basements
or cellars?.....
8. What proportion of the dwelling houses are isolated build-
ings with sufficient yards or clear space all around them?.....
9. Do you know of any houses in which special arrangements
are made for ventilation? If so, give particulars.....
10. Are the cellars or basements in any part of the city damp,
or insufficiently drained?.....

*facts as to size of houses - and especially owner-
ship of houses (involving question of ground-rent, as
in Phila.) and facilities for acquiring fresh air with
effect on health and morals.*

11. Are the cellars used for storing fuel? Are ashes and other sweepings from houses deposited in cellars?.....
12. Have any cases of disease occurred which seemed to be due to over-crowding or improper dwellings? If so, please specify.....

Does the fuel and have any influence upon health - if so specify.

SCHEDULE G.

Gas and Lighting.

1. Is the city lighted by gas?
2. If so, where are the gas works located?
3. Are they a nuisance to the neighborhood?
4. What process of purification is used?.....
5. Is it satisfactory? If not, why not?.....
6. What becomes of the refuse?.....
7. At what price is the gas furnished?.....
8. Is the quality of the gas furnished satisfactory—as to illuminating power, odor, &c.....
9. Have any injurious effects to health been observed from the gas? If so, please specify
10. If any analyses of the gas furnished have been made, or any tests of its illuminating power, please give results
11. What proportion of dwelling houses are not lighted with gas?
12. What restrictions exist on the sale of burning fluids, kerosene, &c.....
13. How many accidents have occurred from explosions of these fluids within the last five years.....

SCHEDULE H.

Garbage and Excreta.

1. What is the law as to removal of garbage?
2. Is this law complied with? If not, what is done?
3. Is the garbage, ashes, &c., removed by the corporation em-
ployés, or by private contractors?
4. Where is it taken to?
5. What is the ultimate disposition made of it?
6. Is the removal well done?
7. Does any nuisance or probable damage to health arise from
the place of deposit?
8. What disposition is made of dead animals?
9. Is this satisfactory? If not, why not?
10. What is the number of houses that have privies with sinks
and with boxes?
11. What are the regulations and methods with regard to con-
structing and cleansing such sinks?
12. Is the method satisfactory? If not, why not?
13. How are the excreta disposed of?
14. Have any cases occurred of contamination of wells or cis-
terns by privy drainage? If so, give particulars or ref-
erences
15. To what extent are earth closets used in the city?

SCHEDULE I.

Markets.

1. Are the markets established by law or custom?
2. If by law, give a copy of the law or laws.....
3. If by custom, state the usages and regulations.....
4. How many public market places are there?.....
5. State for each the location, number of buildings, dimensions.....
6. State for each building, dimensions, number of stories and
height of each, material of which constructed, cost, num-
ber and size of stalls, and mode of their arrangement.....
7. How many meat stalls are there?.....
8. How many fish stalls are there?.....
9. How many butter and cheese stalls are there?.....
10. How many vegetable stalls are there?.....
11. Are the stalls rented or sold?
12. What is the average cost of each?
13. On what days and at what hours are the markets open?
14. What are the regulations as to cleanliness?
15. Are they properly enforced?.....
16. Are the buildings public property?.....
17. If so, are they sources of revenue to the city?
18. What is the system of inspection of markets?.....
19. Give number, title, salaries and duties of municipal officers
charged with inspection of food and markets.....
20. Is the supply of fresh meat satisfactory as to quantity,
quality and variety?

21. If not, why not?
22. Has any meat or fish been condemned by the inspectors
within the last year? If so, how much, and for what
reason?.....
23. Is the supply of vegetables and fruits satisfactory as to
quantity and quality?.....
24. What proportion of the supply is derived from the imme-
diate vicinity of the city?
25. Have any fruits and vegetables been condemned by the in-
spectors within the last year? If so, state quantities.....
26. Are there any municipal regulations with regard to huck-
sters, to private markets, or to hawking of fruits, &c., in
the streets? If so, give copies.....
27. Are fruits and vegetables offered for sale without regard to
quality?.....
28. Can the producers of vegetables, &c., i. e., the market
gardeners, sell direct to the consumer without being sub-
ject to any tax?.....
29. What proportion of them sell direct to the consumers?.....
As usual with supply as to season & price

SCHEDULE K.

Slaughter-Houses and Abattoirs.

1. From what part of the country are animals obtained for
the market of your city?.....
2. How are they fattened or prepared for market?.....
3. How are they conveyed to the place at which they are
slaughtered?

4. Are means adopted, by legislation or otherwise, for supplying food, water, air and exercise to animals while in transit?
5. Are animals, when sent to the market, submitted to inspection before or after slaughtering?.....
6. Are they washed before being killed?
7. What is the method of slaughtering in the city in which you reside?.....
8. Can you give any observations as to the effect of terror in animals producing changes in secretions or flesh, whereby their milk or meat is rendered injurious as food?
9. What is the effect upon their flesh for the market, of depriving animals of food and drink for twenty-four hours, provided this be a day or two before they are killed? or, secondly, immediately before they are killed?.....
10. What diseases, and what stages of disease, in animals, have been observed as rendering their flesh injurious as food?.....
11. What is the mode of slaughtering?.....
12. Are they kept from seeing the various processes and results of butchering?.....
13. How many are annually slaughtered for the city in which you reside?.....
14. What disposition is made of bodies of animals that die in transit?
15. Can you give any statistics, printed or otherwise, of the number of animals and quantity of meat condemned yearly, and why condemned?.....

16. In what manner of buildings are animals slaughtered for
the markets?.....
17. Are abattoirs erected at public or private expense?.....
18. Is the establishment of abattoirs and the business of
slaughtering governed by legislative action, state or
municipal?.....
19. Is the business of slaughtering concentrated in large es-
tablishments, or scattered in small?.....
20. Are abattoirs considered as nuisances in your neighbor-
hood? If so, for what reasons?
21. If a system of abattoirs is adopted in your city, what
facilities are offered to butchers for slaughtering?
22. How does the profit to the butcher under the new system
compare with that under the old?.....
23. What rents are paid by them?.....
24. What processes are in use for preparing meat for the market?.....
25. What disposition is made of the fats, tallow, blood, and
animal refuse?.....
26. Is the refuse of the abattoirs given to hogs, kept for the
purpose?.....
27. If so, how does the meat of these hogs compare with those
which have been corn-fed?.....
28. Is the "rendering" of the animal refuse done on the day
in which animals are slaughtered?
29. Is any method of cooling the meat employed?
30. Give such facts, pamphlets, papers or reference to journals
or books as may bear on these subjects and may serve to
increase the knowledge of the whole matter—whether
covered by these questions or not.....

SCHEDULE L.

Manufactories.

1. Are there any manufacturing establishments which are nuisances; such as distilleries, chemical works, tanneries?.....
2. Are any restrictions imposed on such by law?.....
3. Are there any which pollute the watersupply? If so, how?.....
4. Do they pollute water courses where food fish are taken?.....
5. Have any bad results followed?.....
6. Are there any which produce noxious gases or vapors? If so, specify, and state results.....
7. Are there any which produce disease in the workmen? If so, specify.....
8. Are women employed in the manufactories?.....
9. If so, are they subject to any diseases due to their occupation?.....
10. Are children employed in the manufactories?.....
11. If so, what are their hours of labor?.....
12. What is the age of the youngest so employed?.....
13. Does it affect their health? If so, specify.....
14. Is the cubic space and ventilation in the rooms occupied by workmen generally satisfactory?.....
15. Have any diseases been observed due to insufficient air supply to the workmen?.....
16. Are the arrangements for privies and water closets to these establishments satisfactory?.....

SCHEDULE M.

Public School Buildings.

1. How many public school buildings are in the city?
2. Are they properly located? If not, why not?.....
3. Give for each building the following data: location, altitude and area of site:
 nature of soil, character of drainage, material, date of erection, cost, number
 of stories, number of rooms used as school rooms. Give a floor plan for each
 floor, no matter how rough, if precise dimensions and height of each story is
 stated. Indicate all windows, doors, heating apparatus, and the number and
 position of scholar's desks.
4. How is the building heated?.....
the building is heated by a gas furnace in the basement
5. How much fuel does it require annually?.....
about 100 tons of coal
6. How are the school rooms ventilated in winter?.....
by means of a mechanical ventilator in the basement
7. How are the school rooms ventilated in summer?.....
8. Is the ventilation satisfactory?.....
9. Give analyses of air during school hours, if possible.....
10. What are the water closet and privy arrangements?.....
11. Are they satisfactory? If not, why not?.....
12. What is the water supply?.....
13. Is it abundant and of good quality?.....
14. If not satisfactory, please give details.....
15. What patterns of desks and seats are used?
16. Are they satisfactory?
17. Are the school rooms sufficiently light?.....
18. Give a programme of each school day, showing the division of the time to the
 several studies, recitations, recesses, and intermissions.

19. If any lessons are studied outside of the school hours, mention the subjects so studied, the average time required for the study of each, and the time of day usually devoted thereto.
20. Give the actual length of time devoted each day to out door exercise and recreation, the number of holidays or half holidays in each week, the time of year at which the vacations occur, and the number of days in each vacation.
21. Describe the play grounds, if any: give the area thereof, and describe the gymnastic and calisthenic apparatus used.
22. Is exercise in the open air a compulsory feature of the institution?
23. Is competition a feature in the system of instruction?
24. If so, state fully to what extent it governs the award of prizes; whether different classes or both sexes may compete for the same prize; in this connection, state whether the sexes study and recite together, or not.
25. Is corporal punishment permitted in the school?.....
26. What other methods of correction are used?
27. Mention what measures are taken for the care of the grounds, the flushing or other cleaning of sewers, the removal of excreta, &c.
28. A copy of all regulations and statistics should accompany each report.
29. If statistics of the age, height, and weight of the pupils in each school or class are obtainable, they are important.
30. Are there any statistics respecting the illnesses and deaths of teachers and pupils?.....
31. Please state the results of your observations, experiments, and records respecting the prevalence of the following named diseases (and of any others of like character), and of the effect of the school room, furniture and building in promoting or modifying them.

- a. Diseases of the eye, (short sight, &c.)
- b. Diseases resulting from cerebral congestion, (headache, epistaxis, goitre, &c.)
- c. Diseases of the spine, (scoliosis, &c.)
- d. Diseases of the respiratory organs, (consumption, scrofula, &c.)
- e. Diseases of the digestive organs, (dyspepsia, &c.)
- f. Diseases of the genito-urinary organs, (especially females).
- g. Contagious and epidemic diseases.
- h. Wounds, injuries, &c.

32. Give your experience as to the effect of large schools on the propagation of disease, and as to the advisability in a sanitary point of view, of very large school buildings of several (3 or more) stories in height.
33. State the frequency of uterine diseases among female pupils, and of heart disease among anæmic and debilitated pupils who occupy the upper floor of school buildings, and compare with the frequency among such pupils occupying the first and second stories only.
34. State facts respecting the frequency of short sight among pupils of the several ages and grades, and as to effect of defective light and improperly constructed desks and seats on this disease, and on the production of spinal curvature, &c.
35. Give your observations as to the safety of competition between pupils of both sexes; also, as to the advisability of identical school hours, sessions and lessons for both sexes.

SCHEDULE N.

Hospitals and Public Charities.

1. What hospitals or alms houses are located in or near the
city?
2. Have descriptions been published of them? If so, where?

3. Give for each hospital, infirmary, alms house, and asylum the following data :

location, nature of soil, direction and character of drainage, form, area of grounds, number of stories, number and size of wards, floor room per bed in wards, cubic space per bed, floor plans of building, no matter how rough if dimensions are given carefully.

4. Heating and ventilation, mode of?.....
5. Is it satisfactory? If not, why not?
6. Water closets, how placed?
7. How ventilated? Are they satisfactory?... ..
8. Of what material is the building constructed?.....
9. Is it fire proof?.....
10. What precautions are taken against fire?.....
11. How is the hospital governed, by trustees, municipal board,
or medical men?
12. How are the governors appointed, by external authority,
or by filling their own vacancies?
13. What are the titles of the employés, number of each, how
are they appointed?
14. To what extent do medical men control the management
of the hospital?.....
15. What was the original cost of the building?.....
16. What is the annual average cost of repairs?.....
17. What is the annual average cost of pay of employés?.....
18. What is the annual average cost of food?
19. What is the annual average cost of medicines and ap-
paratus?
20. What is the annual cost of fuel?.....

21. Is the hospital connected with a medical school?.....
22. Is there an out-door dispensary connected with it?.....
23. What was the number of cases treated during the past year?.....
24. Have any cases of hospital zymotic diseases, such as ery-
sipelas, pyæmia, puerperal disease, &c., occurred?.....
25. If so, were they confined to one ward?.....
26. If not so confined, has any epidemic or endemic influence
manifested itself in the neighborhood?.....
27. Is the hospital accommodation sufficient for the wants of
the city?
28. Please furnish a copy of the rules and regulations of the hospital.

SCHEDULE O.

Police and Prisons.

1. What is the organization of the police force?
2. Do its members act as inspectors of nuisances?
3. How many temporary lockups or station houses are
there?.....
4. What is the average number of prisoners occupying each?.....
5. What is the air space per head for such average occupancy?.....
6. What is it for the maximum occupancy?
7. What are the dimensions of the cells for single prisoners?.....
8. Are the vagrants kept separate from the prisoners?.....
9. Is the ventilation of the station houses satisfactory?.....
10. Are the privy arrangements satisfactory?
11. Are there any jails, penitentiaries, or houses of correction
within the city limits? If so, please state what they are.....

12. What is the average occupancy of each?.....
13. What are the dimensions of the single cells?.....
14. How are they heated and ventilated?.....
15. If ground plans of these institutions can be obtained please
furnish them.....
16. Have any reports, and especially any medical reports, of
these institutions been printed?.....
17. If so please give titles, dates and place of publication
18. Have any epidemics occurred among the prisoners? If so,
specify.....
19. What is the diet allowed prisoners?
20. What are the occupations of the prisoners?
21. What is the estimated number of houses of prostitution in
the city?

22. What is the estimated number of prostitutes?.....

SCHEDULE P.

Fire Establishments, Alarms, Engines, &c.

1. Is your fire establishment organized under state or local
law?.....
2. Is your fire establishment voluntary or paid?.....
3. Are fires frequent?.....
4. What constitutes the peculiar element of danger?.....
5. What is the general character of your buildings (brick,
wood, iron)?
6. What kind of fuel is in general use?.....

7. What illuminating material is in general use?.....
8. What is the number of steam fire-engines?
9. What is the number of hand fire-engines?
10. Is the locomotion by hand, horses or steam?.....
11. What is the number of engines in relation to area protected?.....
12. What is the number of engines in relation to buildings protected?.....
13. What is the number of engines in relation to population?.....
14. What is the number of hook & ladder trucks, hose carriages, &c.....
15. Have you any floating engines, or steamers with special fire pumps?.....
16. Whence is your water supply for fire purposes? Is it abundant, and how is it distributed?
17. Is your water supply ever used for flushing sewers and gutters? If so, is it done regularly and systematically?
18. Are "fire extinguishers" in general use?.....
19. Are there many in private houses?
20. What patents, or kinds, of extinguishers are most in favor?.....
21. What is the general testimony in regard to them?.....
22. What is the annual expense of your fire establishment?.....
23. What number of persons employed in your fire department?.....
24. What number of hours are your firemen on duty?
25. What is the manner of berthing and subsisting the men on duty?.....
26. What per cent of sick days among paid and disciplined firemen?

27. What proportion of accidents in line of duty?.....
28. What proportion of mortality in line of duty?.....
29. Is there a medical man connected with your establishment?.....
30. Are his services given by contract, or otherwise?.....
31. About what proportion of diseases and accidents are found
among your volunteer firemen, incidental to their service?.....
32. What is the general character of your volunteer firemen
for discipline, efficiency and sobriety?.....
33. Have you an insurance patrol for discovering fires and sav-
ing property?
34. What loss of life from fire in the past year?
35. What loss of property from fire in the past year?
36. What proportion of fires, in past year, arose from dangerous
and unfit fluids for lighting purposes?
37. What proportion from carelessness, such as defective con-
struction, smoking, matches, fireworks, &c.?.....
38. What proportion from spontaneous combustion of oiled
cotton waste, &c.?
39. What proportion from incendiary?.....
40. Have you a fire-alarm and police telegraph? What system?.....
41. Is the fire-alarm automatic?.....
42. What proportion of alarm boxes to area protected?
43. Does the system thoroughly answer its purpose?.....
44. Have you an ambulance system, in connection with your
telegraph, for conveying wounded and sick to hospital?.....

SCHEDULE Q.

Cemeteries and Burial.

1. Are there any cemeteries within the city limits?.....
2. If so, are interments now made in them?
3. How many and what cemeteries are near the city?.....
4. Give number of graves in each, the annual interments
5. What becomes of the drainage from them?
6. Is it liable to contaminate springs, wells, or water courses?.....
7. What is the average depth of the grave?.....
8. What is the nature of the soil?.....
9. Is the soil dry at the depth at which the body is placed?.....
10. Are vaults used?.....
11. If so, are they of brick or stone?.....
12. What is the rapidity of decay in the vault?
13. What is the rapidity of decay in the graves as shown by
exhumations?
14. Has any nuisance or evil effect been observed from the
cemeteries? If so, specify.....
15. Are any extra precautions taken with regard to the burial
of persons dying of contagious diseases?.....

SCHEDULE R.

Public Health Laws, Regulations, Officials—Municipal.

1. Name of board of health.....
2. Number of members of board.....
3. Bounds within which its authority is exercised.....

4. When organized?
5. By whom is the board selected?.....
6. What amount of salary to members?.....
7. Does the board derive its powers from state or city?.....
8. What proportion of the board are physicians?.....
9. Is the chief health officer selected by or from the board, or
is he appointed?
10. How often does the board meet?.....
11. Are the powers of the board specifically defined or limited
by law?.....
12. Has the board a corps of assistant health officers?.....
13. Are they all physicians?
14. How many assistants?
15. Have they police powers?.....
16. Has the board authority to abate or only authority to de-
fine nuisances?.....
17. Has the board authority independent of city councils and
police?
18. Has the board power to remove persons sick with contagious
diseases to special hospital?
19. What vital statistics does the board register?.....
20. Does it require all children to be vaccinated?.....
21. Does it regularly report causes of mortality and records of
deaths?.....
22. To whom does the board report?.....
23. How often does the board report?
24. In what form is the report published?.....

SCHEDULE S.

Registration and Statistics of Disease.

1. Is a system of the registration of the causes of death in

force?

2. If so, give a copy of the law or regulation relating to it.....

3. Have statistics of the mortality of the city been published?

4. If so, for what periods, where, and in what form?.....

5. At what periods, and with what mortality have the fol-

lowing diseases been epidemic in the city, viz.:

a. Cholera.....

b. Yellow fever.....

c. Small pox.....

d. Scarlatina.....

e. Diphtheria.....

f. Cerebro-spinal fever.....

6. During the last five years what has been the mortality from

the following named diseases, stated by months:

A. Malarial fever.....

B. Typhoid fever.....

C. Cerebro-spinal fever.....

D. Erysipelas.....

E. Dysentery.....

F. Diarrhoea.....

G. Scarlatina.....

H. Diphtheria.....

I. Croup.....

K. Measles.....

have not been since designation of race, more Chinese

leaf

7. State for the same period, by months, the number of deaths
of children under one year of age.....
8. From one to five.....
9. From five to fifteen.....

Quarantine.

1. What are the laws or ordinances, state or municipal, now in force in regard to quarantine?.....
2. Where is the quarantine station located?.....
3. Is it floating or on shore?.....
4. What is its construction?.....
5. How near are the nearest inhabited dwellings not belonging to the quarantine establishment?.....
6. For how many sick is there hospital accommodation?.....

The Southern Plains red-bellied squirrel is
 1. This time Mongon. a ainal - Persicula in re yellow
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7. What is the area of the grounds?
8. What are the charges for accommodation, food, &c.?
9. State, by months, the number of persons received into the
lazaret for the last three* years.....
10. What diseases have occurred among the persons received during
that time? How many cases of each, and how many deaths?
11. How many deaths, and from what causes, have occurred
among the officials or employés of the quarantine during
the same period?
12. What are the countries or ports from which arrivals are at
all times, or in certain seasons of the year, subject to
quarantine, whether the bill of health from the place of
departure be clean or foul?.....
13. What are the diseases which render all arrivals, from a place
or country where such diseases are existing, subject to
quarantine in your port, and what are the quarantines
imposed?.....
14. What are the other diseases which, from having occurred
during the voyage or transit, render individual arrivals
only, subject to quarantine, irrespective of the bill of
health from the last place of departure, and what are the
quarantines imposed?
15. Please furnish a tabulated list of all the vessels put in quar-
antine in your port during the last three or five years
(or, if not for so long a period, during the last twelve
months), specifying—
 - a. Whence the vessel came, the length of voyage,
and date of arrival.....

* If statistics for a longer period can be given, so much the better.

- b. The bill of health, whether clean, suspected, or
foul.....
- c. The cause of detention in quarantine.....
- d. The length of quarantine imposed.....
- e. The number of crew and passengers on board.....
- f. Cargo, the nature of.....
- g. Whether any, and how many cases of disease,
and of what nature, had occurred during the
voyage.....
- h. Whether any, and what disease occurred on
board during the detention in quarantine.....
16. Is any difference, as to the quarantines imposed, made in
favor of vessels having a medical officer on board?
17. When a disease, which renders all arrivals from an infected
or suspected place liable to quarantine, has been officially
certified to have ceased, and when clean bills of health
are issued by the local authorities, what period, if any,
must elapse before free pratique is granted to arrivals
from the place?
18. Have any instances occurred in recent years of the spread-
ing of a disease from persons, or from goods, undergoing
quarantine, to other inmates of the lazaret, or to the
officials of the establishment, or to the inhabitants of the
nearest dwellings? If so please give the dates and other
particulars briefly?

19. Are cargoes sent to the lazaret? If so, what cargoes or articles of merchandise are considered to be "susceptible," and what means are used for their purification?.....
20. When sickness occurs in a vessel while undergoing quarantine, and there is no medical officer on board, how is medical assistance provided, or to be obtained? Is medical assistance provided at the public cost?
21. When a vessel arrives from a suspected port, or in a sickly condition, rendering her subject to quarantine, is any inspection then made of her state, as regards cleanliness and ventilation? And if found filthy or badly ventilated what means are taken to remedy such defects? Is any record kept of the sanitary condition of vessels put in quarantine?.....
22. When a clean bill of health is given to a vessel on leaving the port, is she previously inspected by any officer to ascertain her sanitary condition, and that of the crew and passengers, and is any certificate of such inspection given to the captain?.....
23. Have any diseases for which quarantine is liable to be imposed in the port occurred among the inhabitants of the place or of the neighborhood during the last ten, fifteen, or twenty years? If so, under what circumstances? (It is very desirable that the exact dates of the earliest cases, and other authentic particulars respecting the origin or development of the disease, should be stated in a narrative of the circumstances).....

24. Have instances of the evasion or infraction of quarantine come to your knowledge? Have they been of frequent occurrence? What penalties have been inflicted for the offense?
25. What, if any, quarantine measures by land, such as sanitary cordons, &c., have been adopted, or are considered advisable, in the town, against the introduction of pestilential diseases?
26. If such measures have been of recent years employed, what have been the results?
27. Please to append a copy of the quarantine act and regulations at present in force in the town. Also, any annual or other reports illustrative of the working and results of quarantine there, or containing evidence elucidatory of the importation or non-importation of the diseases for which quarantine is imposed.

A schedule to cover the liquor question might be introduced: embracing varieties and amounts of liquor drunk; number of places for its sale; regulations of sale; bearing effects of different kinds of liquor on health, on crime, money spent in tippling, ^{which} loss to public & drinking.